



January 30, 2023

Environment Committee

Legislative Office Building, Room 3200, Hartford, CT 06106

Phone: 860-240-0440

Email testimony:

https://www.cga.ct.gov/asp/CGATestimonySub/CGAtestimonysubmission.aspx?comm_code=env

**Re: SUPPORT (WITH AMENDMENT) HB 6484, AN ACT CONCERNING CERTAIN
HARVESTING OF HORSESHOE CRABS**

Dear Co-Chair Lopes, Co-Chair Gresko, Vice Chair Hochadel, Vice Chair Palm, Ranking Member Harding, Ranking Member Callahan, and Honorable Members of the Environment Committee,

On behalf of the Connecticut-based supporters of The Humane Society of the United States (HSUS), the largest animal protection organization in the country, please accept this public hearing testimony in SUPPORT (WITH AMENDMENT) of HB 6484, which would prohibit the hand-harvesting of horseshoe crabs or the eggs of horseshoe crabs from the waters of Connecticut.

Horseshoe crabs, whose anatomy has remained nearly unchanged for hundreds of millions of years, are an important contributor to coastal biodiversity. Horseshoe crab eggs are a major food source for migrating birds, such as the federally protected Red Knot.

Harvesting of horseshoe crabs is currently under the management of DEEP via a permitting process. In Connecticut, horseshoe crabs are harvested for use as bait for conch and eel fisheries. In other states, horseshoe crabs are sometimes collected for their blood, for use in endotoxin tests.¹ Our understanding is that harvesting for blood by medical supply companies is not done here in Connecticut, and that the intention of this bill is to not allow any harvesting, including for the purpose of blood collections. In furtherance of this legislative intent, we propose amending the language to remove the allowance of DEEP-issued permits for scientific purposes.

HSUS is gravely concerned about the continued use of a component of horseshoe crab blood, Limulus amoebocyte lysate (LAL) for endotoxin testing of medical products by those with a commercial interest, despite the availability of effective and reliable non-animal tests. To create this test, horseshoe crabs are captured from the wild and up to 30% of their blood is removed

¹ Vaccine, injectable drug and medical device manufacturers must test for endotoxins, a type of bacterial contaminant that, if present, can cause patients to develop symptoms that can include fever, chills, headache and nausea.

by medical supply companies. The crabs are later returned to the wild; however, it is estimated that 10-15% or more of them die as a result of this process.

Better alternatives for endotoxin testing exist. Scientists have developed recombinant Factor C (rFC), a synthetic alternative to the protein in horseshoe crab blood that can detect bacterial endotoxins. Repeated studies have demonstrated that rFC is equivalent or superior to the LAL test. A second method—the monocyte activation test (MAT)— uses human (non-embryonic) cells and can not only detect bacterial endotoxins, but also pyrogenic non-endotoxins. With effective synthetic and human cell-based alternatives to this type of endotoxin testing, there is no scientific need to continue the biomedical use of horseshoe crabs.

As a member of the Horseshoe Crab Recovery Coalition,² the Humane Society of the United States is advocating for the replacement of the LAL test with rFC or MAT, in addition to various other horseshoe crab protection efforts.

Per the late horseshoe crab expert Dr. Jennifer Mattei from Sacred Heart University, hand harvesting is a major cause of population decline in Long Island Sound and has resulted in functional extinction. In her 2022 public hearing testimony on this matter, Dr. Mattei wrote:

“This “functional extinction” has occurred with other species in CT as well including pollinating insects, oysters, Spartina grasses, etc. A management plan that merely keeps a species from going extinct is not good enough. It should keep the Long Island Sound ecosystem functioning sustainably.”³

Horseshoe crabs need protection, and we are thankful for the Environment Committee, and especially Rep. Joe Gresko, for your sustained advocacy on this matter.

Thank you for your time and consideration. To learn more, please visit humanesociety.org/horseshoecrabs.

Yours truly,



Annie Hornish
Connecticut Senior State Director
The Humane Society of the United States
Cell: (860) 966-1819
Email: ahornish@humanesociety.org

² <https://hscrabrecovery.org/>

³ <https://cga.ct.gov/2022/ENVdata/Tmy/2022HB-05140-R000225-Mattei,%20Jennifer,%20Professor-Sacred%20Heart%20University-Support%20TMY.PDF>